

FIG. 1

LOCUS HSTGFB3M 2574 bp RNA PRI 12-SEP-1993
 DEFINITION Human mRNA for transforming growth factor-beta 3 (TGF-beta 3).
 ACCESSION X14149
 NID g37095
 KEYWORDS growth factor; transforming growth factor; transforming growth factor-beta 3.
 SOURCE human.
 ORGANISM Homo sapiens
 Eukaryotae; mitochondrial eukaryotes; Metazoa; Chordata; Vertebrata; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 2574)
 AUTHORS Chen, E.Y.
 TITLE Direct Submission
 JOURNAL Submitted (23-MAR-1989) Chen E.Y., Genentech Inc., 460 Pt. San Bruno Blvd., San Francisco, CA 94080, USA
 REFERENCE 2 (bases 1 to 2574)
 AUTHORS Derynck, R., Lindquist, P.B., Lee, A., Wen, D., Tamm, J., Graycar, J.L., Rhee, L., Mason, A.J., Miller, D.A., Coffey, R.J., Moses, H.L. and Chen, E.Y.
 TITLE A new type of transforming growth factor-beta, TGF-beta 3
 JOURNAL EMBO J. 7 (12), 3737-3743 (1988)
 MEDLINE 89091120
 COMMENT See <J03241> for alternative sequence of TGF-beta 3.
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 /db_xref="SWISS-PROT:P10600"
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 SKRNEQRIELFQILRPDEHIAKQRYIGGKNLPTRGTAEWLSFDVTDTVREWLLRRESN
 LGLEISIHCPCHTFQPNGDILENIHEVMEIKFKGVDNEDDHGRGDLGRLKKQKDHNP
 HLILMMIPPHRLDNPQGQGRKKRALDTNYCFRNLEENCCVRPLYIDFRQDLGWKVVH
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 GRTPKVEQLSNMVKCKCS"
 BASE COUNT 629 a 680 c 666 g 599 t

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FIG. 1 (cont'd)

ORIGIN

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121 caccttcttg ccaagcctca gtctttggga tctggggagg ccgcctgggtt ttcctccctc
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301 ctttgccacg gtcagcctct ctctgtccac ttgcaccacc ttggacttcg gccacatcaa
361 gaagaagagg gtggaagcca ttaggggaca gatcttgagc aagctcaggc tcaccagccc
421 ccctgagcca acggtgatga cccacgtccc ctatcagggtc ctggcccttt acaacagcac
481 ccgggagctg ctggaggaga tgcattggga gagggaggaa ggctgcaccc aggaaaacac
541 cgagtcggaa tactatgcca aagaaatcca taaattcgac atgatccagg ggctggcgga
601 gcacaacgaa ctggctgtct gccctaaagg aattacctcc aaggttttcc gcttcaatgt
661 gtccctcagt gagaaaaata gaaccaacct attccgagca gaattccggg tcttgcggtt
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901 gtccaactta ggtctagaaa tcagcattca ctgtccatgt cacacctttc agcccaatgg
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1261 taagggtac acgggtgctg gactgtacaa cactctgaac cctgaagcat ctgcctcgcc
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1381 ttgctgcgtg cccagggacc tggagcccc gaccatcctg tactatgttg ggaggacccc
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1561 acacaagcaa caaacctcac tgagaggcct ggagcccaca accttcggct ccgggcaaat
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2041 cttttgcaaa ctgtcctcta catcaattaa catcgtgggt cactacaggg agaaaatcca
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2161 gaaaggggtg aaatcaaccc tctcctgtct gccctctggg tccctcctct cacctctccc
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2281 tggattgttg ttccatgcag ccttggggca ttatgggtct tccccactt cccctccaag
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2401 agctgcacat gtgccacaca gtgacttggc ccagacgca tagactgagg tataaagaca
2461 agtatgaata ttactctcaa aatctttgta taaataaata tttttggggc atcctggatg
2521 atttcatctt ctggaatatt gtttctagaa cagtaaaagc cttattctaa ggtg

//

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FIG. 2

LOCUS HSU22431 3678 bp mRNA PRI 28-JUN-1995
 DEFINITION Human hypoxia-inducible factor 1 alpha (HIF-1 alpha) mRNA, complete cds.
 ACCESSION U22431
 NID g881345
 KEYWORDS .
 SOURCE human.
 ORGANISM Homo sapiens
 Eukaryotae; mitochondrial eukaryotes; Metazoa; Chordata; Vertebrata; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 3678)
 AUTHORS Wang, G.L., Jiang, B.H., Rue, E.A. and Semenza, G.L.
 TITLE Hypoxia-inducible factor 1 is a basic-helix-loop-helix-PAS heterodimer regulated by cellular O2 tension
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 92 (12), 5510-5514 (1995)
 MEDLINE 95296340
 REFERENCE 2 (bases 1 to 3678)
 AUTHORS Wang, G.L., Jiang, B.-H., Rue, E.A. and Semenza, G.L.
 TITLE Direct Submission
 JOURNAL Submitted (09-MAR-1995) Gregg L. Semenza, Center for Medical Genetics, The Johns Hopkins University School of Medicine, 600 N. Wolfe St., Baltimore, MD 21287-3914, USA
 FEATURES
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 /db_xref="taxon:9606"
 /cell_line="Hep3B"
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 /gene="HIF-1 alpha"
 CDS 29..2509
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 /standard_name="hypoxia-inducible factor 1, alpha subunit"
 /note="basic helix-loop-helix transcription factor"
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 /product="hypoxia-inducible factor 1 alpha"
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 QNTQRSFFLRMKCTLTSGRTMNIKSATWKVLHCTGHIHVDYDTSNQPCGYKKPPMT
 CLVLICEPIPHPSNIEIPLDSKTFLSRHS LDMKFSYCDERITELMGYEPEELLGRSIY
 EYYHALDSDHLTKTHDMFTKGQVTTGQYRMLAKRGGYVWVETQATVIYNTKNSQPQC
 IVCVNYVVSGIIQHDLIFSLQQTECVLKPVESSDMKMTQLFTKVESEDTS S LFDKLLK
 EPDALTL LAPAAGDTIISLDFGSNDTETDDQQL EEVPLYNDVMLPSPNEKLQINLAM
 SPLPTAETPKPLRSSADPALNQEVALKLEPNPESLELSFTMPQIQDQTPSPSDGSTRO
 SSPEPNPSEYCFYVDS DMVNEFKLELVEKLF AEDTEAKNPFSTQD TDL DLEMLAPYI
 PMDDDFQLRSFDQLSPLESSASPESASQSTVT VFOQTQIQEPTANATTTTATTDDEL
 KTVTKDRMEDIKILIASPSPTHIHKETTSATSSPYRDTQSRTASPNRAGKGVIEQTEK
 SHPRSPNVLSVALSQRTTVPEELNPKILALQNAQRKRKMEHDGSLFQAVGIGTLLQQ
 PDDHAATTSLSWKRVKGCKSSEQNGMEQKTIILIPSDLACRLLGQSMDESGLPQLTSY
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 /note="42 A nucleotides"
 BASE COUNT 1197 a 695 c 675 g 1111 t

10028158 "040902"

FIG. 2 (cont'd)

ORIGIN

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421  tgtgtttgat  tttactcatc  catgtgacca  tgaggaaatg  agagaaatgc  ttacacacag
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601  attgcactgc  acaggccaca  ttcacgtata  tgataccaac  agtaaccaac  ctcagtgtgg
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721  aaatattgaa  attcctttag  atagcaagac  tttcctcagt  cgacacagcc  tggatatgaa
781  attttcttat  tgtgatgaaa  gaattaccga  attgatggga  tatgagccag  aagaactttt
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901  tcattgatag  tttactaaag  gacaagtcac  cacaggacag  tacaggatgc  ttgccaaaag
961  aggtggatat  gtctgggttg  aaactcaagc  aactgtcata  tataacacca  agaattctca
1021  accacagtgc  attgtatgtg  tgaattacgt  tgtgagtggg  attattcagc  acgacttgat
1081  tttctccctt  caacaaacag  aatgtgtcct  taaaccgggt  gaattctcag  atatgaaaat
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1261  agattttggc  agcaacgaca  cagaaactga  tgaccagcaa  cttgaggaag  taccattata
1321  taatgatgta  atgctccctt  cacccaacga  aaaattacag  aatataaatt  tggcaatgtc
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1441  tcaagaagtt  gcattaaaat  tagaaccaaa  tccagagtca  ctggaacttt  cttttaccat
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1561  tgagcctaatt  agtcccagtg  aatattgttt  ttatgtggat  agtgatatgg  tcaatgaatt
1621  caagttggaa  ttggtagaaa  aactttttgc  tgaagacaca  gaagcaaaag  acccattttc
1681  tactcaggac  acagatttag  acttggagat  gttagctccc  tatatcccaa  tggatgatga
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1921  tatggaagac  attaaaaat  tgattgcata  tccatctcct  acccacatac  ataaagaaac
1981  tactagtgcc  acatcatcac  catatagaga  tactcaaagt  cggacagcct  caccaaacag
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FIG. 3A

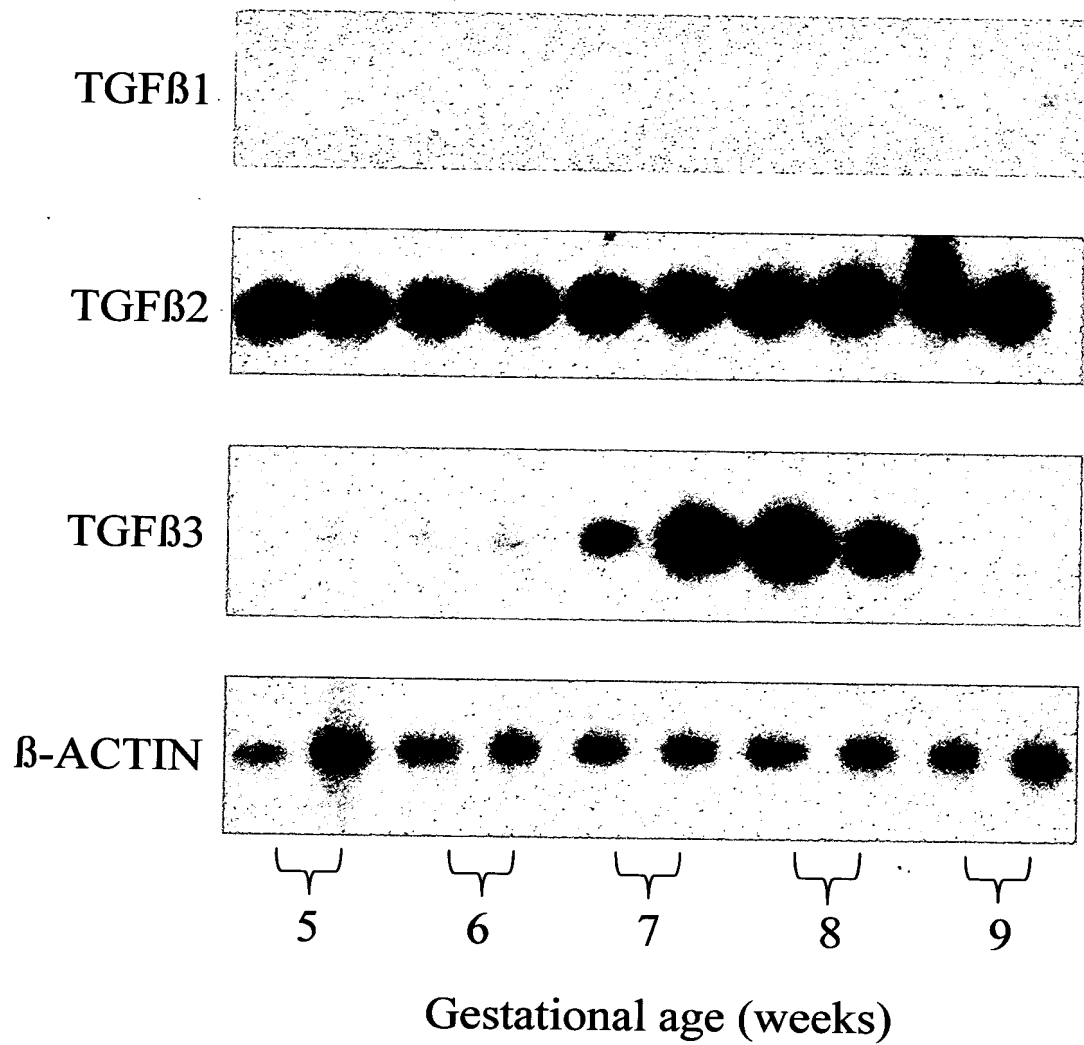
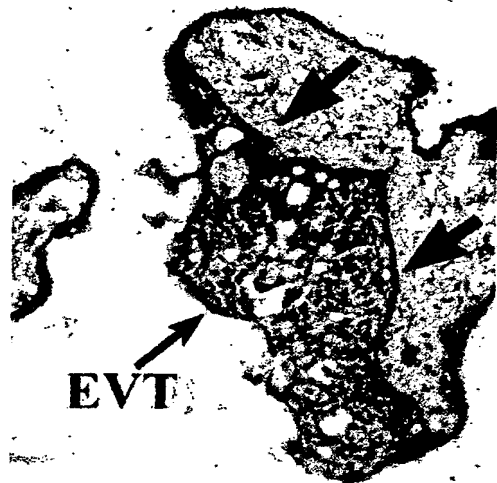


FIG. 3B



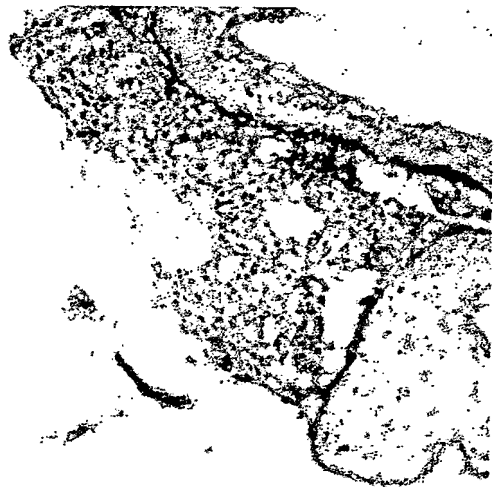
5 weeks



8 weeks



12 weeks



8 weeks (control)

FIG. 4A

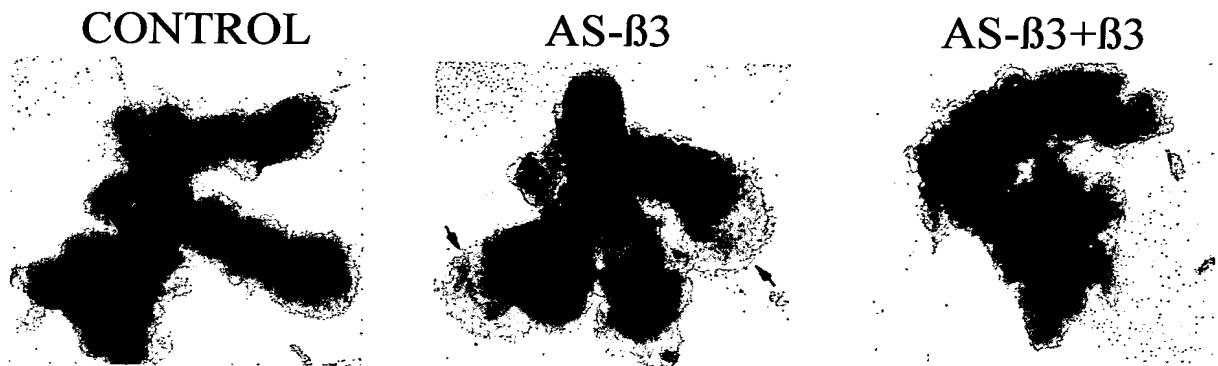


FIG. 4B

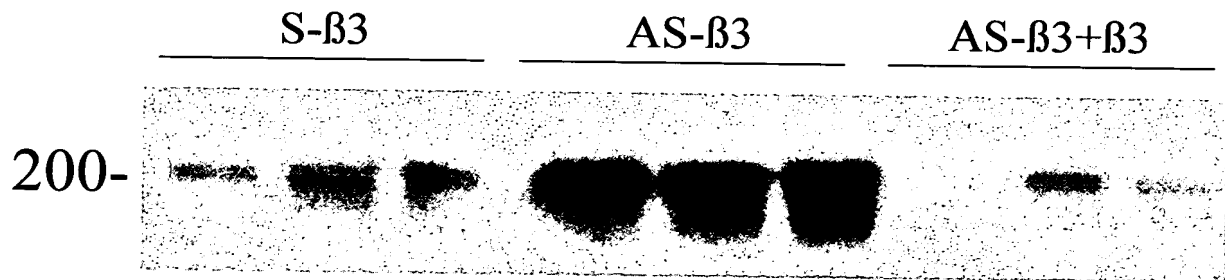


FIG. 4C

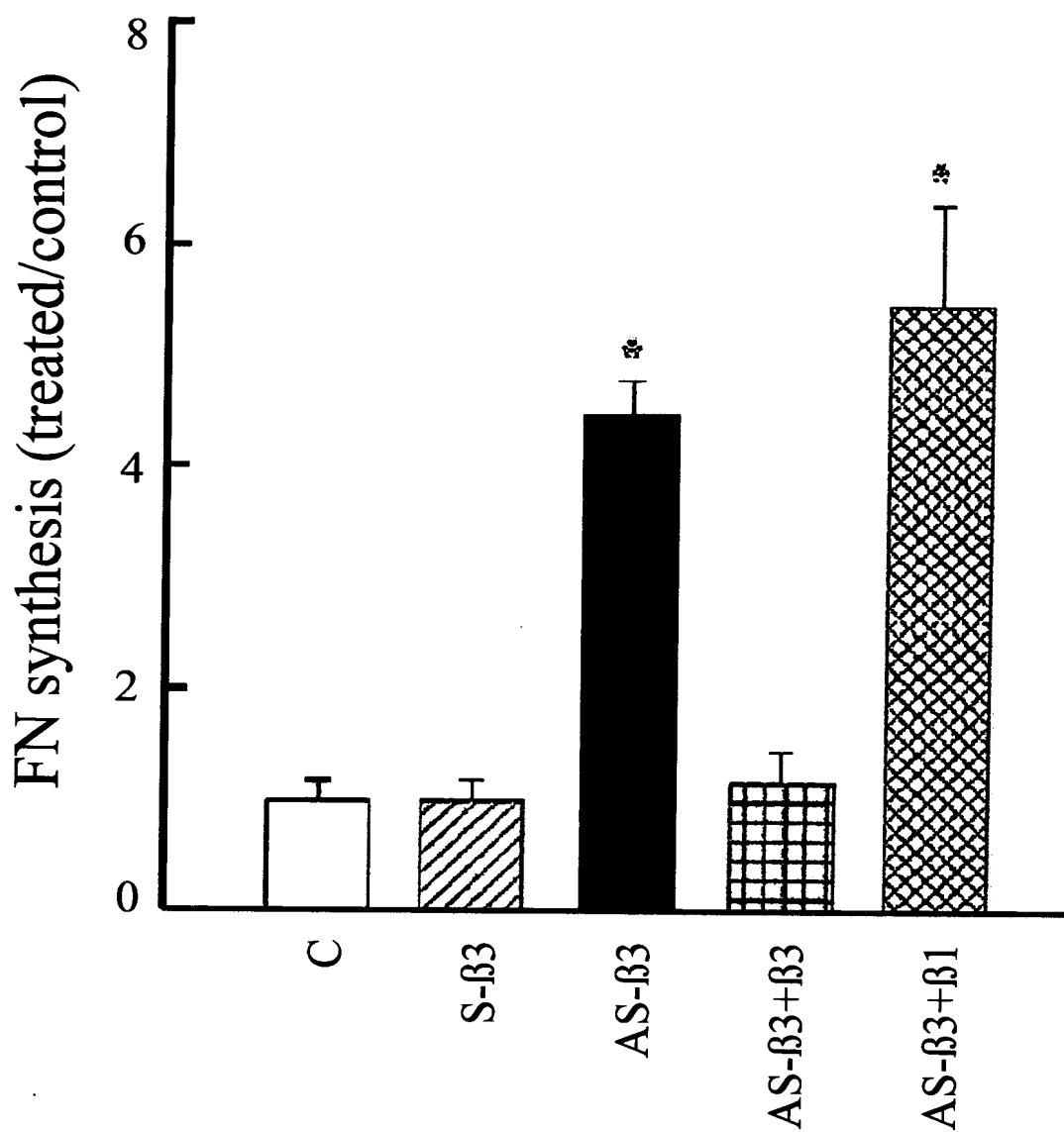


FIG. 4D

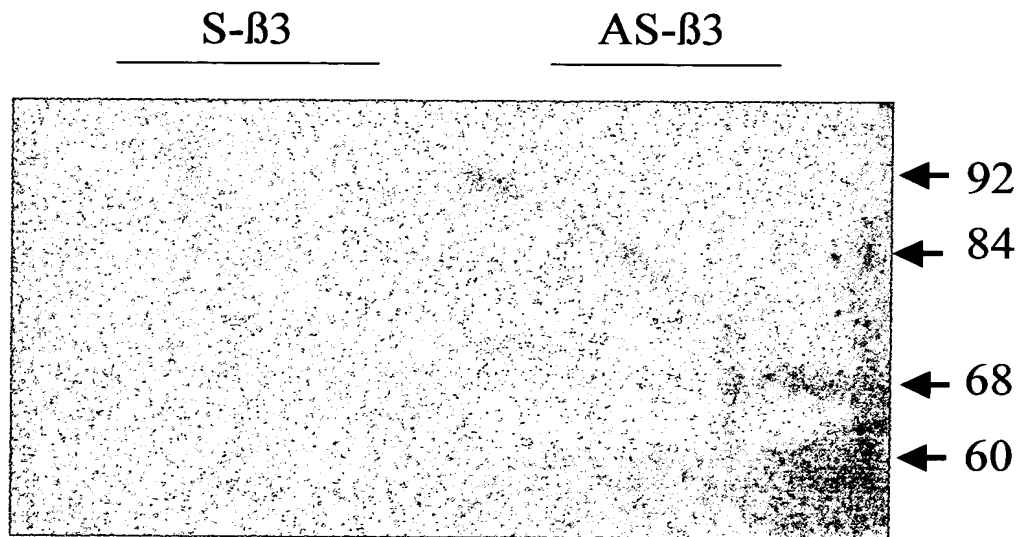


FIG. 4E

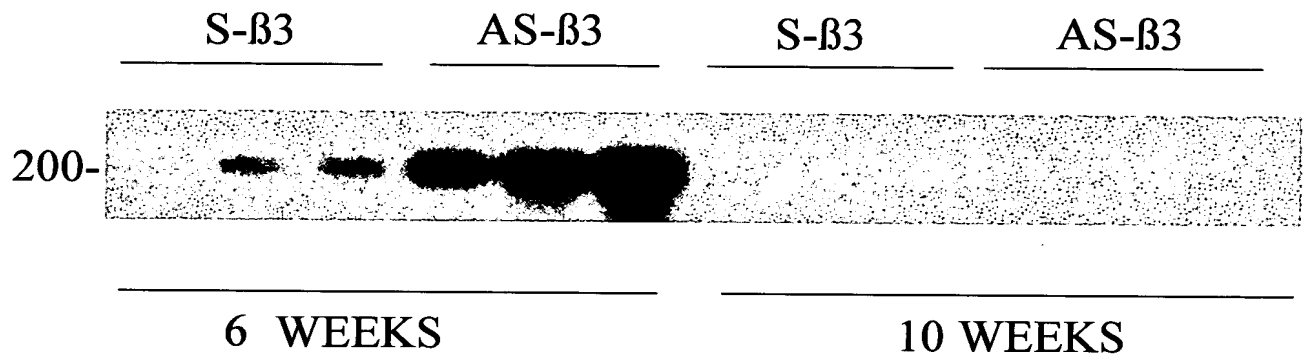


FIG. 5A

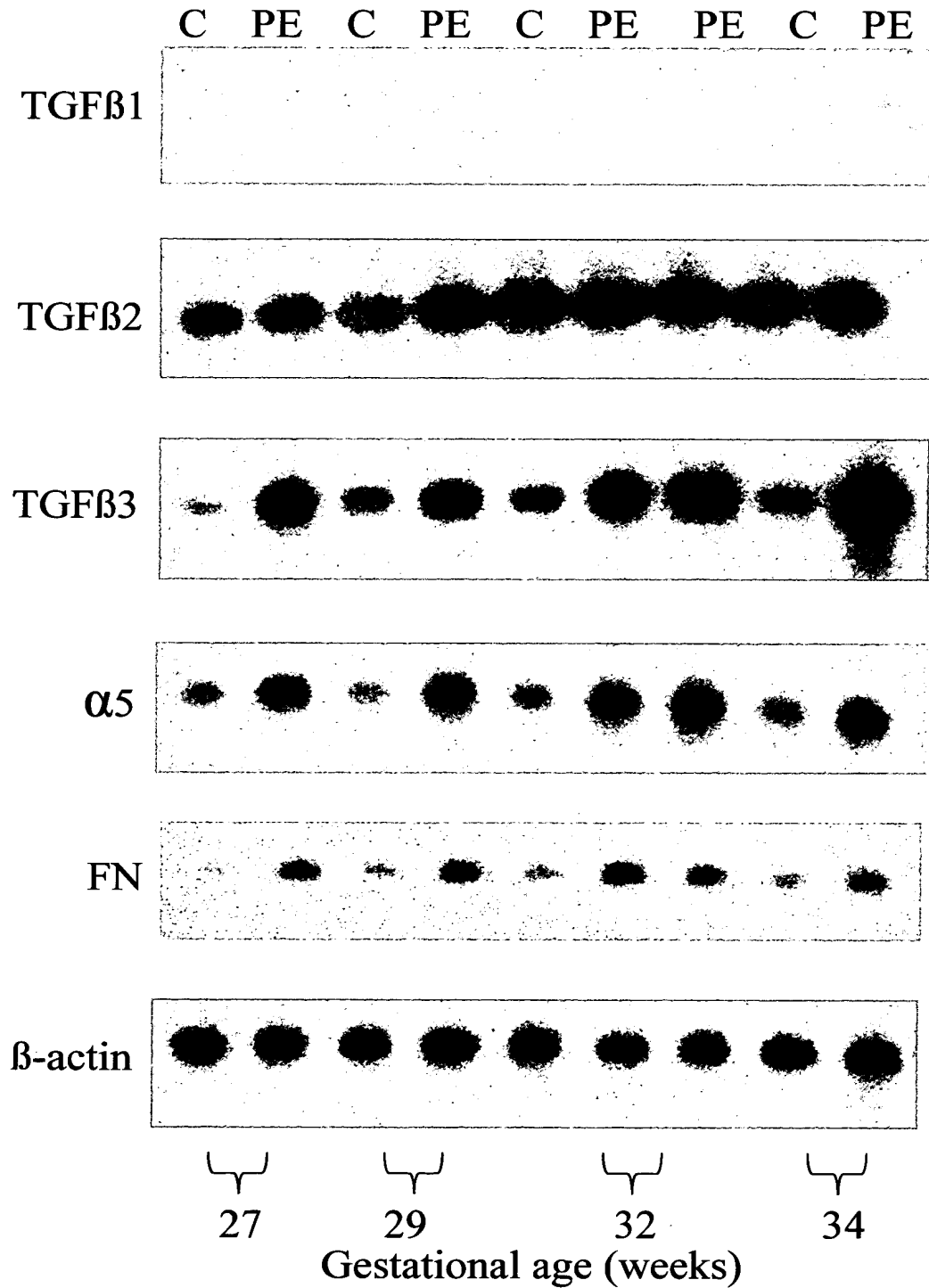


FIG. 5B

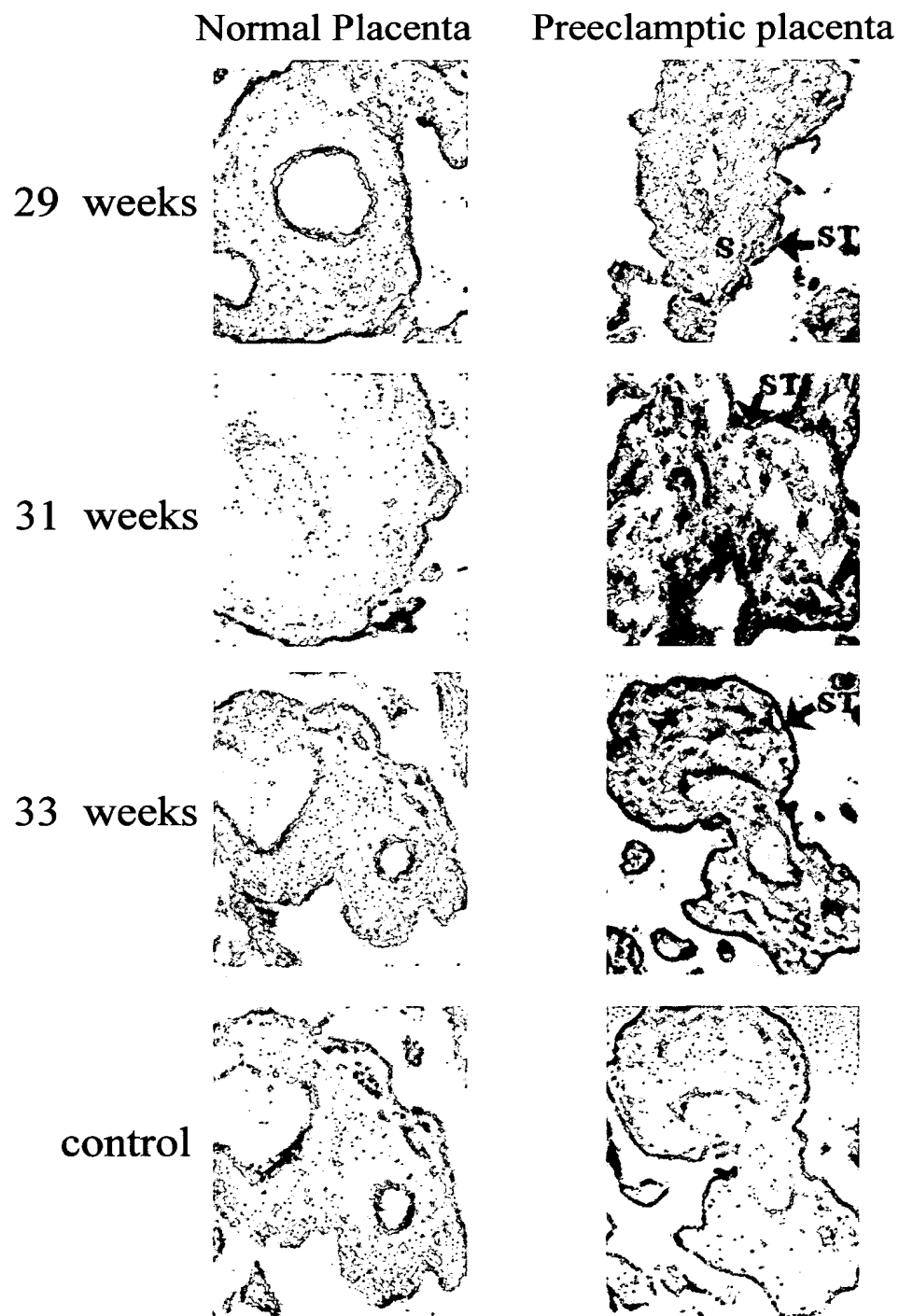
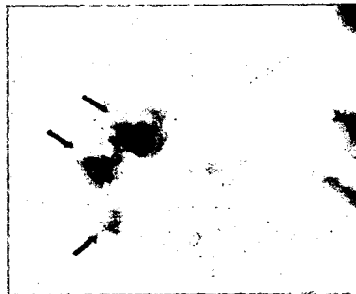


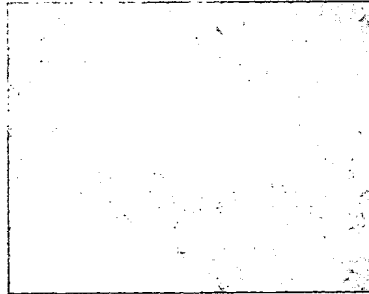
FIG. 6A

Normal Placenta

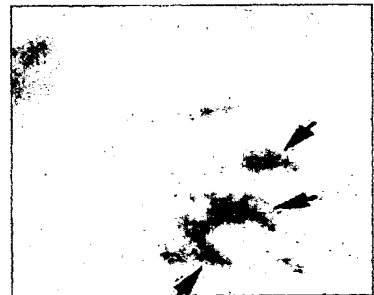
Preeclamptic placenta



S-β3



S-β3



AS-β3

FIG. 6B

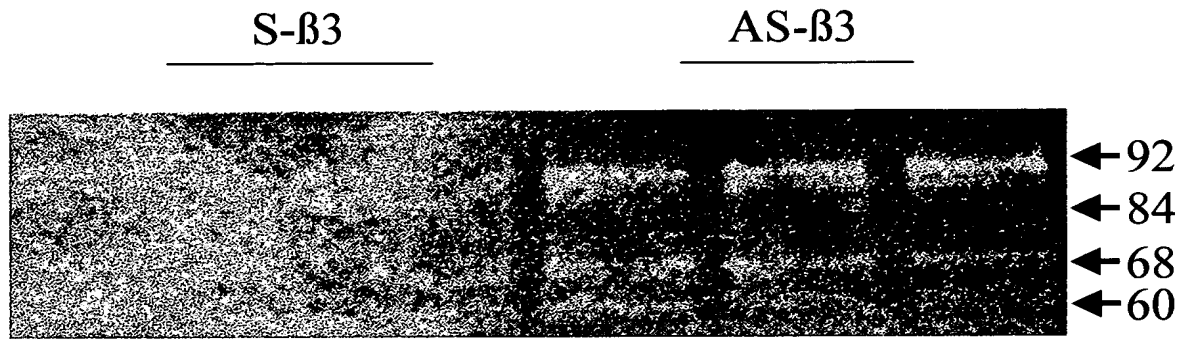


FIG. 6C

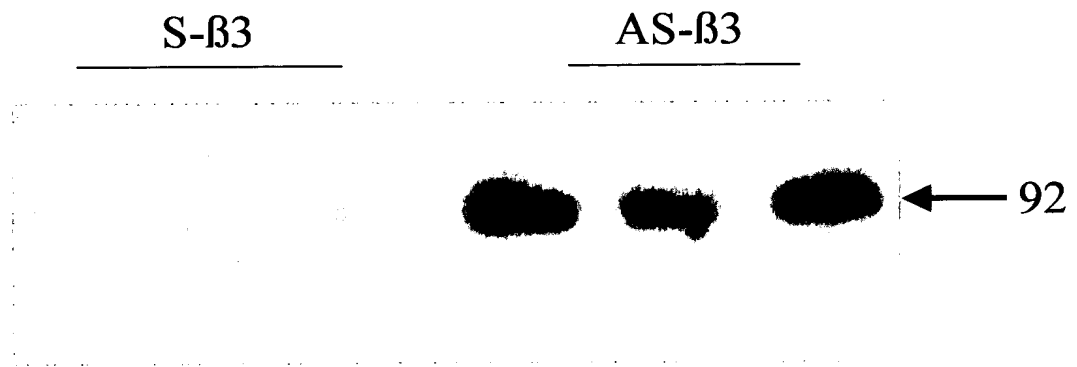


FIG. 7A

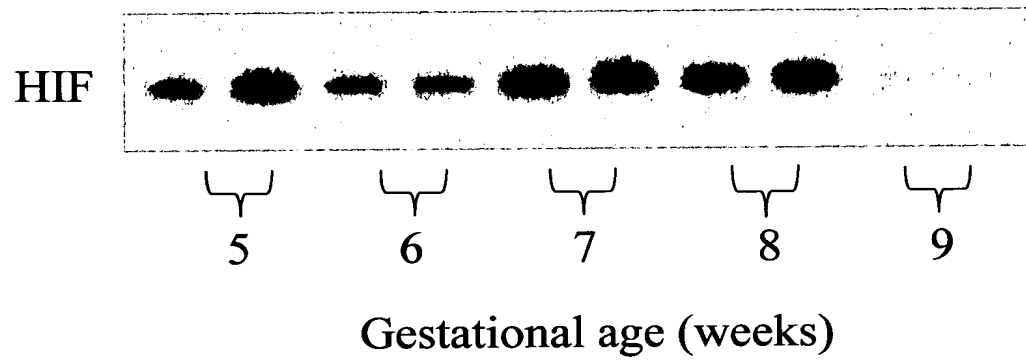


FIG. 7B

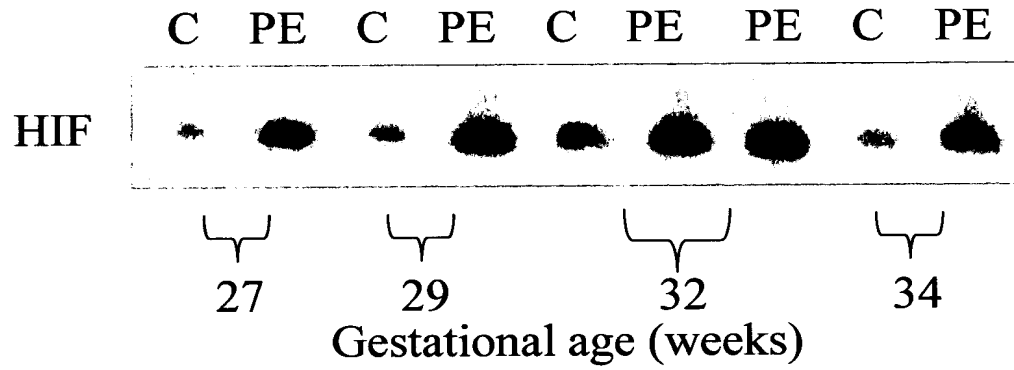


FIG. 8

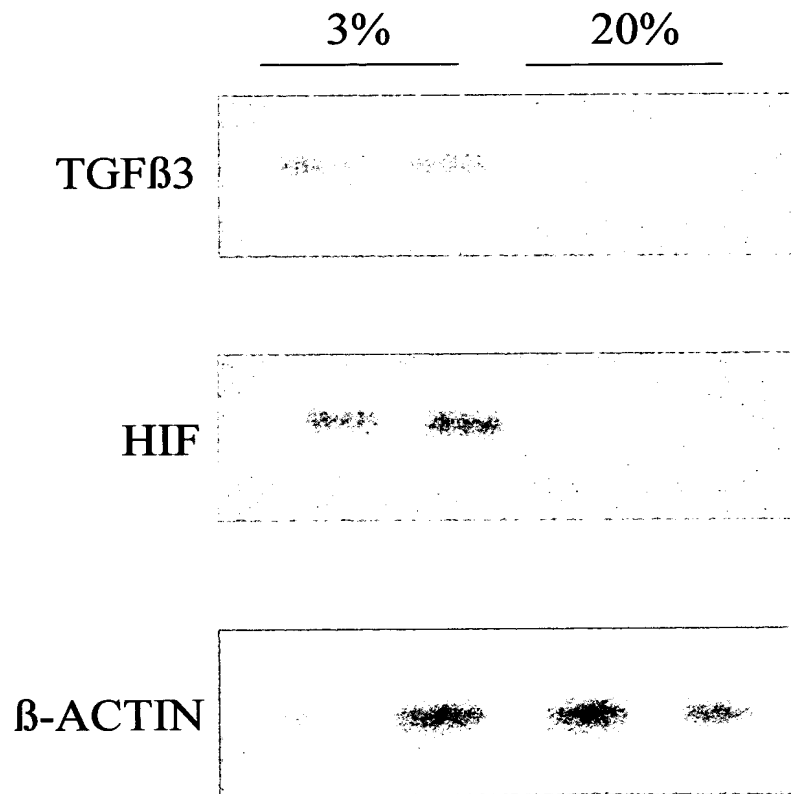


FIG. 9

20% O₂

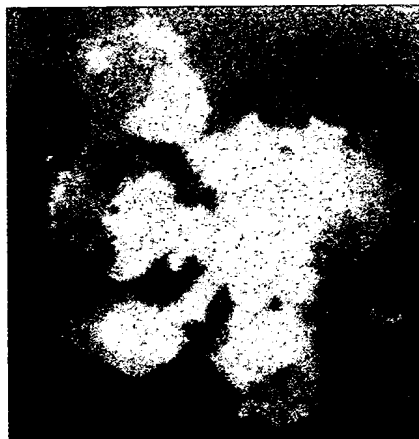


25X



50X

3% O₂



25X



50X

FIG. 10

